Agency Contact Information:

Agency Name: Bismarck State College
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Technology Overview:

Bismarck State College (BSC), the fourth largest college in the North Dakota University System, is a comprehensive community college providing student-centered learning in the areas of transfer courses, vocational-technical programs, online classes and programs, corporate and continuing education, and workforce training. In addition, several degrees and programs are offered on the BSC campus in cooperation with other N.D. University System institutions.

Ten buildings on the 100-acre campus provide living and learning space for students from throughout North Dakota as well as from other states and countries. In addition to the local campus buildings, BSC utilizes space in three off-campus facilities. The Electrical Lineworker Program is located at the headquarters of the North Dakota Rural Electric Cooperatives northwest of Mandan. Allied Health programs are located at the Allied Health Campus located in leased space in downtown Bismarck. BSC also leases space in the Horizon Office Building located just north of the main campus for the following offices: College President, Executive Vice President, Provost/Vice President for Academic and Student Affairs, Vice President for College Advancement and Federal Relations, Division of Corporate & Continuing Education, BSC Foundation and College Advancement, BSC National Alumni Association, Energy Technology Online Department and OSHA Consultation Services.

The ten buildings located on the main campus and the Horizon Office Building located just north of the main campus are interconnected with fiber for data and video transmission and they are connected with copper cable for voice transmission. BSC leases fiber to the Allied Health Campus allowing that facility to be connected to the main campus local area network for data, video and voice services. Data service to the Electrical Lineworker facility is provided by Midcontinent Communications.

BSC owns a Meridian Option 61AC telephone switch which provides analog and digital voice service for the main campus and the Horizon Office Building. Voice service to the Allied Health Campus is provided by the Meridian Option 61AC switch using voice over IP technology. Voice service to the Electrical Lineworker facility is provided by using business line circuits furnished by Qwest.

BSC has in excess of 1,000 desktop and laptop computers used by more than 4,000 BSC faculty, BSC staff, BSC students and students from Dickinson State University, Minot State University and the University of North Dakota. Support is also provided for Dickinson State University staff, Minot State University staff and University of North Dakota staff located on the BSC campus.

The college is also engaged in two separate laptop programs. With the first laptop program all full time faculty, administration, select staff members and select adjunct faculty are assigned laptops. The 225 laptops are on a three year lease. The campus will enter into another lease for new laptops when the current lease expires in the fall of 2007.

The second laptop program started the fall semester of 2005. This was the first semester the Electronics/Telecommunications Technology department required their students to use laptops for their curriculum. The laptops are leased to the student for two years. The student is given the option to purchase the laptop after the two year lease expires.

BSC offers online courses via the Internet, making it possible for people anywhere with Internet access to complete college credit classes. The courses are designed for independent learners and those who need freedom in their scheduling. This function is outsourced to eCollege, a full service postsecondary eLearning provider focused on the needs of distance learning programs.

Information Technology Organization:

BSC has multiple areas providing technology services and support for their campus, each reporting to a different department on campus.

The Audiovisual and Interactive Video department is responsible for coordinating audiovisual services, Interactive Video Network (IVN) services, and Interactive Television Network (ITV) services for the college. The department operates under the supervision of the Audio/Visual Coordinator and reports to the Director of Distance Education. BSC has five IVN studios and one ITV studio. In addition, the campus has more than 50 smart classrooms maintained by the Audiovisual IVN/ITV department. Staffing of this department consists of three full time employees and five student employees. Areas of responsibility for this department include, but are not limited to:

- Coordinate satellite uplinks and downlinks
- Schedule and facilitate Interactive Video Network rooms for receiving and hosting events
- Schedule and facilitate Interactive Television Network for receiving and hosting events
- Support for campus audio and video services
- Create and maintain campus smart classrooms (Currently BSC has more than 50 smart classrooms. Each classroom consists of the following configuration: an instructor console, one DVD/VCR unit, one theater amplifier unit, two wall mounted speakers, one LCD projector, one 84/84 high reflective screen, one VGA capable visual presenter and an Internet connection.)

The development and maintenance of the BSC Web site is the responsibility of the BSC Web Development Specialist. The Web Development Specialist reports to the Public Information Officer. The specialist is specifically charged with continually updating information, adding new information, and consulting with BSC employees and students with regard to developing their respective department webpages and to making overall content, design, and navigational improvements to their Web sites. These designated employees and students (to be determined by their immediate supervisors) are responsible for the general updating of existing web content so that it remains accurate, current, understandable and useful to readers. When necessary and appropriate, the specialist will explain the BSC Web site guidelines to employees.

The Multi-Media Specialist/Online Instructional Designer reports to the Directory of Library Services, but works jointly with the Enhanced Web Developers, who report to one of the Energy Technology Online Program Directors. BSC has three Enhanced Web Developer positions, one of which is currently vacant. Together, these areas are responsible for developing online and classroom multimedia, simulation and animation for incorporation into all energy program courses. They use software such as Flash to develop enhanced animations and simulation exercises to be used as identified by energy employees.   They also assist energy employees in preparing instructional multi-media digital files to include, but are not limited to: audio, graphics, photographs and video as well as conventional audio/visual materials, PowerPoint and other computer programs.

The Information Services department is the last of the areas providing technology services to the campus. Information Services is the central service provider for campus IT services, providing support services for multiple technologies and system platforms. Information Services operates under the direction of the Chief Information Services Officer and reports to the Executive Vice President of BSC. Staffing consists of 6.5

employees and two student employees. Responsibility areas for this department include, but are not limited to:

- Administration of IT Organization, IT Planning, Technology R&D
- Administrative/campus Information Systems unique to BSC (e.g. ImageNow system, Bookstore Point of Sale System, Corporate & Continuing Education registration and conference software, etc.)
- Desktop computing support, user support services, selective training
- Campus Infrastructure and Services
- File server support and administration
- Help Desk
- Information Technology Policy
- Information Technology Security
- Student computer lab support
- Network infrastructure and services (every classroom has access to the Internet)
- Operations and data center
- Telephony

IT Goals and Objectives:

Information Services has identified the following goals, projects, and strategies through the 2011 biennium:

- BSC has started the deployment of a wireless system on campus. We will continue to expand the wireless network across campus through the 2011 biennium.
- Implementation of an automated system requiring individuals connecting to the BSC campus network to be authenticated and to also have their computer registered with Information Services automatically. The system will also be a network access control solution that will help us define and automate the enforcement and remediation of endpoint security acceptable use standards. By this implementation, we will be focusing on policy management at the point of network access and provide the following capabilities:
    - o Prevent unauthorized user access to our wired, wireless, and VPN networks
    - o Ensure users maintain compliance with anti-virus, Microsoft security patch, and peer-to-peer file sharing software
    - o Automate the isolation of non-compliant devices
- Work on the implementation of an Identity Management system. It is the hope this may allow us to work towards a single sign-on for the campus.   As mentioned earlier, BSC serves faculty, students, and staff from multiple campuses and members from the Board Office from the BSC campus. Ideally a system wide solution can be implemented to benefit the entire University System.
- Work jointly with the University System and possibly ITD and K-12 to move towards a system wide Collaboration Suite of software. Fundamental applications include email, discussion forums, calendar, web-based file storage, instant messaging, desktop videoconferencing, and a collaboration suite portal that will provide convenient access to all suite applications. Possible functionality, depending on the vendor and costs to implement, could include the following: voice message and fax integration with email; interactive whiteboard and application sharing integrated with web conferencing; web file synchronization with desktop files.
- Implement a data conduit system across the north side of the BSC campus. This conduit system will provide an organized path for connecting voice, video and data systems to the proposed High School Technical Center scheduled to be constructed before the end of the 2011 biennium.
- Provide voice, video and data connectivity to the National Energy Center of Excellence currently under construction, provide voice and data services to a dormitory currently under construction, provide voice and data connectivity to the Industrial Maintenance facility currently under construction at a remote site, and provide voice and data connectivity to the High School Vocational Center tentatively scheduled to be constructed by the end of the 2011 biennium.

- Continue the implementation of a digital, paperless system for all BSC administrative departments (ImageNow).
- Renovate the Information Services facility to allow for adequate mechanical functionality, space for the server farm, space for networking equipment, space for the Help Desk and space for staffing of the Information Services personnel.

IT Issues:

The main issue for Information Services is funding for IT. We have aging networking equipment that is in excess of six years old and will be designated as end-of-life by the vendor shortly. We are starting to slip on our computer replacement cycle from a three – four year replacement cycle to a four – five year replacement cycle. We are outgrowing the existing space in our computer center suite. Also, the mechanical system for the computer center is a system that requires manual intervention when the campus has a power glitch. This creates issues with our equipment, especially in the evening or on a weekend (which happens occasionally).

Currently, BSC has three facilities under construction (two buildings on campus (the NECE building and Lidstrom Hall) and one building at a remote site (Industrial Maintenance Building). Each of the three buildings will require voice and data connectivity. The NECE building will also require video connectivity as well as two IVN studios and multiple computer labs. An additional computer lab is also planned for the Industrial Maintenance Building.

As mentioned earlier, our replacement cycle for desktop computers is falling from a three – four replacement cycle to a four – five year replacement cycle. This is happening as Microsoft is preparing the release of their new Operating System and the release of their new version of MS Office, which will require a more robust computer to run the systems. Existing computers will need to have their computing capacity increased to be able to accommodate the new systems.

In addition to IT funding, other IT related issues of major importance to our campus are (in no particular order) security and identity management, infrastructure issues, issues related to emerging technologies, change management (e.g. keeping up with technological change, managing expectations, managing infrastructure and/or service changes without disruption, etc.), and collaboration/partnerships (e.g. sharing infrastructure, expertise and applications, exploring multi-institutional consortial initiatives and strategic alliances, etc.).

Campus Name	Bismarck State College			
Project	Bismarck State College IT Budget Elmer Weigel (701)224-5515 Elmer.Weigel@bsc.nodak.edu			
Number of Central IT FTE's	6.5			
Number of Other Campus IT FTE's	8			
Number of vacant Central IT FTE's	0			
Number of vacant Other IT FTE's	1			
Account Code	Account Code Desc	05-07 Biennium	07-09 Request	09-11 Estimate
510000	Salaries and Wages (Central IT)	574,200	623,100	673,900
510000	Salaries and Wages (Other IT-IVN)	228,100	244,300	264,200
510000	Salaries and Wages (Other IT-Web Development Specialist)	98,300	105,800	114,400
510000	Salaries and Wages (Other IT-Enhanced Web Developers)	249,603	266,314	288,043
516000	Benefits (Central IT)	185,600	199,800	216,000
516000	Benefits (Other IT-IVN)	64,500	69,100	74,700
516000	Benefits (Other IT-Web Development Specialist)	31,500	33,900	36,600
516000	Benefits (Other IT-Enhanced Web Developers)	79,870	85,220	92,170
611000	Professional Development	10,000	10,300	10,600
521000	Travel (As relates to Professional Dev.)	14,000	14,500	14,900
602000	IT Telephone	191,200	203,075	209,100
531000	IT Software/Supplies	308,000	317,200	326,800
581035, 581040, 581045, 591070, 621230, 621235, 623090	IT Contractual Services and Repairs	1,488,855	1,455,380	1,499,210
551000	IT Equipment under $5000	460,940	382,290	638,300
693000	IT Equipment $5000 and over	141,950	104,300	88,600
	TOTAL:	**4,126,618**	**4,114,579**	**4,547,523**
Funding Source	Funding Source Desc			
	Appropriation	816,874	889,839	930,941
	Tuition	641,829	695,545	727,682
	Student Technology Fee	255,350	278,200	298,900

	Program Fee	87,400	90,000	92,700
	Local Funds	1,834,124	1,975,001	2,059,475
	Carry Over Funds	159,685	0	0
	Grants	331,356	185,994	437,825
	Other	0	0	0
	Total:	**4,126,618**	**4,114,579**	**4,547,523**
BSC intends to purchase equipment items > $5,000 from other than general funds.				